

CLAIMS

1. A safety device for stirring assemblies, to be applied to shelf paint vessels, characterized in that said safety device comprises a top portion having coupling means for coupling to a top part of a shelf, comprising driving means, means for locating and centering the stirring cover, and further coupling means for coupling to a bottom portion, provided for covering a supporting element for supporting stirring means and all the provided driven elements.

2. A safety device, according to Claim 1, characterized in that the top portion comprises a top cylindric portion having an upper part on which are formed a tooth element and a perforated bracket for coupling and clamping said top portion, for example by a self-threading screw, to the top construction comprising the driving means.

3. Safety device, according to Claim 2, characterized in that on the side portion of the top cylindric portion are formed two guides allowing said stirring cover to be easily arranged and centered, whereas, at the rear part of said top cylindric portion is formed an opening or cut-out for engaging

therein a tooth element formed in a bottom conic portion of said safety device.

4. A safety device, according to Claim 3, characterized in that said bottom conic portion covers, for an extension of about 180° , a horn element constituting a part of the stirring means and covering, in cooperation with said top cylindric portion, all the driven or movable elements of said safety device.

5. A safety device, according to Claim 3, characterized in that in said bottom conic portion is provided a tooth element which, in addition to allowing said bottom conic portion to be coupled to said top cylindric portion, prevents the paint vessel from turning.

6. A safety device, according to Claim 5, characterized in that, for preventing the bottom conic portion from turning and following the shaft of the stirring cover, a fork element is provided at the bottom part of said safety device, said fork element having a rib interfering with said stirring cover, thereby preventing any rotary movements while allowing to compensate for possible height differences of different vessel paints.

7. A safety device, according to Claim 6, characterized in that said compensation is achieved up to a level of 18 mm.

8. A safety device, according to Claim 4, characterized in that said horn element, which comprises a stirring shaft, is made as a single piece of a plastics material, and that, at a top portion of said horn element are provided two cylinders for coupling to the driving means.

9. A safety device, according to Claim 8, characterized in that in a bottom portion of said horn element is formed a recess for engaging therein a sintered bush for facilitating the rotary movement of said stirring shaft with respect to said bottom conic portion.

10. A safety device, according to Claim 9, characterized in that said sintered bush is made of a sintered auto-lubricating material and is rigid with said stirring horn element.

11. A safety device, according to Claim 8, characterized in that said stirring shaft has a hexagonal cross-section and at a bottom portion thereof is tapering to a smaller cross-section, of hexagonal configuration, for allowing a stirring fan

to be plugged-in and locked, said stirring fan being clamped by said two tooth elements formed at the bottom end portion of said stirring shaft.

12. A safety device, according to Claim 11, characterized in that a sliding ring nut is arranged at a portion of said stirring device underlying said bottom conic portion, for preventing said bottom conic portion from contacting a seeger ring element allowing said bottom conic portion to be coupled and clamped to said horn element.